

Additional aspects of the present invention can provide optical structures. For example, first and second elongate liquid bumps can be provided on a substrate wherein the first and second elongate liquid bumps are parallel, and an optical fiber can be provided in contact with and between
 5 the first and second elongate liquid bumps. Alternatively, first and second optical components can define an optical path therebetween, and a liquid bump between the first and second optical components can be adapted to selectively interrupt and allow the optical path between the first and second optical components.

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BRIEF DESCRIPTION OF THE DRAWINGS

Figures 1A-C are plan and cross-sectional views illustrating vertical displacement of components by changing liquid volumes according to embodiments of the present invention.

15 Figures 2A-C are plan and cross-sectional views illustrating lateral displacement of components by changing liquid volumes according to embodiments of the present invention.

Figures 3 and 4A-^D~~C~~ are perspective and cross-sectional views illustrating displacements of fibers using elongate liquid bumps according to
 20 embodiments of the present invention.

Figure 5 is a perspective view of adding liquid to a liquid bump according to embodiments of the present invention.

Figures 6A-E are plan and cross-sectional views illustrating sumps and reservoirs according to embodiments of the present invention.

25 Figure 7 is a plan view illustrating alternate examples of reservoirs according to embodiments of the present invention.

Figures 8-11 are cross-sectional views illustrating displacement of components using liquid bumps according to embodiments of the present invention.

30 Figures 12A-E and 13A-E are plan and cross-sectional views illustrating movement of liquid on a constrained symmetric surface using a temperature differential across the liquid according to embodiments of the present invention.